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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,519	08/29/2001	Xiaoming Gu	280/50357	5214

7590 03/13/2003

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EXAMINER

WILLIAMS, ERIC M

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,519

Applicant(s)

GU, XIAOMING

Examiner

Eric M Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01-28-2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the papers filed 01-28-2003 for serial number 09/940,519.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauer ('435). The following reproduced claims set forth the corresponding structure of Bauer.

7. A wet multiplate clutch (Fig. 9) comprising plural friction plates (75) and plural separator plates (84,85) that are alternately arranged, wherein said separator plates are groove free separator plates (84, 85 are groove free separator plates), wherein between each two friction plates arranged adjacent to each other, at least two of the plural

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groove free separator plates are disposed separably from each other (Figure 9 shows the plural plates).

3. A wet multiplate clutch according to claim 7, wherein between each two mutually-adjacent ones of said plural groove free plural separator plates disposed between each two friction plates arranged adjacent to each other, a thin member is interposed (Figure 9 shows thin member 86).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer ('435) in view of Avers ('035).

Bauer discloses all the limitations of claim 6, but lacks any specific teaching of the separator plates being coated and the thickness of the groove-free separator plates is being between .5 and 1.52 mm. Avers discloses a multiplate clutch (Fig. 1) with the separator plates being "coated" Fig. 3 (24e, 24b) via adhesion (column 4 lines 32-40) to a member Fig. 3 (24g). Furthermore, Avers discloses a clutch with the separator plates (24a, 24b) with a thickness between .01 and .09 inches, which is equivalent to .254 mm and 2.286 mm (abstract). It would have been obvious to one of ordinary skill in the art

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at the time of the invention to modify Bauer, in view of Avers, such that it was coated with an adhesive to better secure the circular layer (86) of Bauer to the separator plates. It also would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bauer such that it had separator plates with a thickness between .5 and 1.52 mm, in view of Avers, to engineer a size that reduces vibrational noises.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer ('435) in view of Ueno et al. JP 405231443A.

Bauer discloses all the limitations of claim 5, but lacks any specific disclosure of the separator plates being machined. Ueno et al. teaches machining separator plates in a wet multiple disk clutch to improve durability (Constitution). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bauer such that the separator plates were machined, in view of Ueno, to improve the durability of the separator plates and the wet multiple disk clutch.

Response to Arguments

8. Applicant's arguments with respect to claims 3-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujioka ('944) discloses a wet type multiple disc clutches with two separator plates between every two disc plates. Hauser ('444) and Riggle et al. ('815) disclose discs with machined surfaces. The English Translation of Kazuhiko Shibata (JP 59054825A) has been provided.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Williams whose telephone number is 703-305-0607. The examiner can normally be reached on Mon. - Fri. from 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

EMW
February 23, 2003



 2/23/03
Richard M. Lorence
Primary Examiner
AU 3681